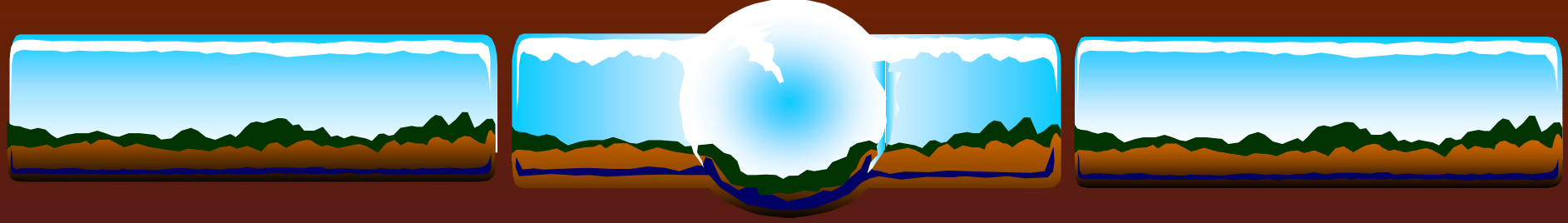


The Information Quality Act:
The First Two Years of Implementation

NMFS Social Sciences Workshop

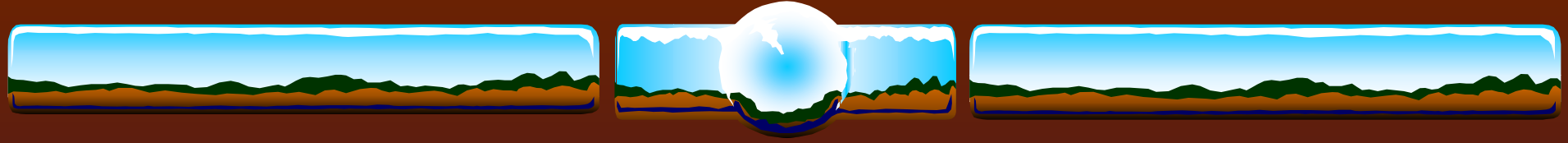
New Orleans, LA; October 2004

Peter H. Fricke, PhD

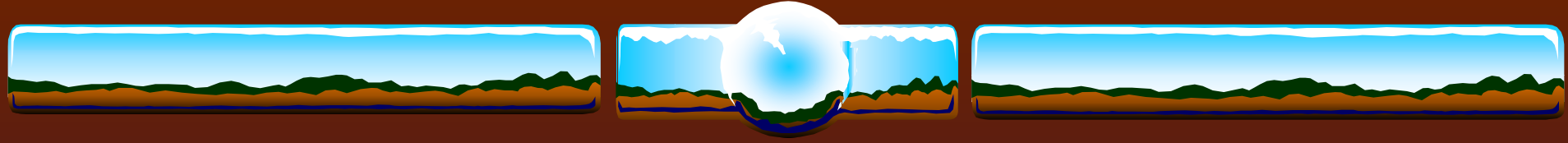
NOAA Fisheries, Office of Sustainable Fisheries

The Information Quality Act

- The views expressed in this paper are those of the author alone, and should not be construed to represent the views of NOAA Fisheries on the issues discussed.



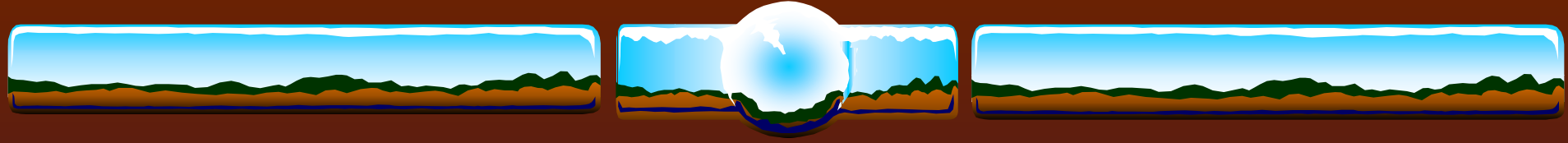
“Where is the wisdom we have lost in knowledge? Where is the knowledge we have lost in information?” ~ *T.S. Eliot*



“The right to search for truth implies also a duty: one must not conceal any part of what one has recognized to be true”

and

“If we knew what we were doing, it would not be called research, would it?” *A. Einstein*

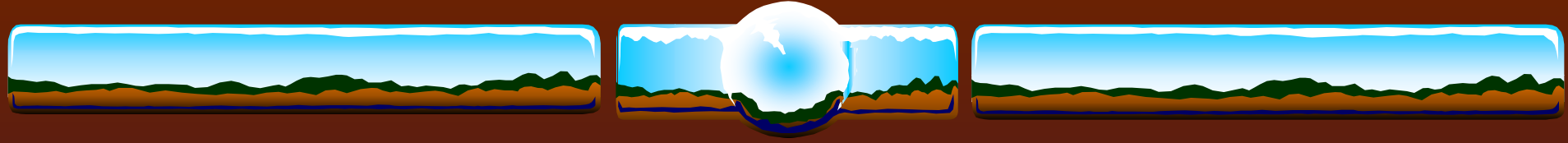


Purpose of this Paper

- To review the initial two years of life under the Information Quality Act (IQA)
- To review the steps we social scientists must take to comply with IQA
- To provide material on changes planned for the information highway

The Information Quality Act

- Is Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, and amends the PRA
- Required OMB to publish guidelines "that provide policy and procedural guidance for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by Federal agencies."
- The OMB guidelines were published February 22, 2002, and complementary agency guidelines were published in the Fall of 2002



The Guidance Provided by Agencies

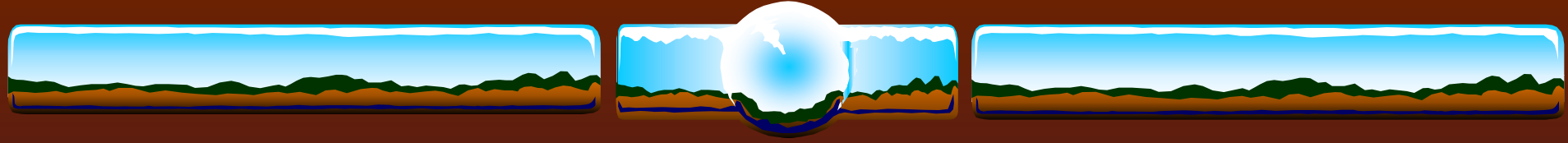
- Covers all information disseminated by Federal agencies to the public through publications, online, or other means
- Information is any "representation of knowledge such as facts or data" that has been collected, used or sponsored by an agency
- Two tiers of information:
  - General information and data: this must meet the standards of independent, formal peer review
  - Influential information and data: this must meet peer-review standards and the data and methods must be transparent and replicable by third parties

Guidance, continued

- Agencies shall adopt a basic standard of data quality (including objectivity, utility and integrity) as a performance goal
- Agencies shall adopt a process for reviewing the quality of information before it is disseminated
- Agencies shall establish administrative mechanisms allowing affected persons to seek and obtain, where appropriate, timely correction of information maintained and disseminated by the agency that does not comply with OMB or agency Information Quality Act guidance.

Perceptions of the Information Quality Act

- "New law could cloud access to EPA data" [Environment Writer, 14(3):1 (June 2002)]
- "Law revises standards for scientific study" [New York Times, March 21, 2002]
- "Science junk hits the Washington fan" [Cato Institute, February 25, 2002]
- "Questions about online data" [New York Times, June 3, 2002]
- "New law will let businesses attack data underlying rules" [Wall Street Journal, July 5, 2002]
- "The Data Quality Act: A new tool for ensuring clarity at the interface of science and policymaking" Center for Regulatory Effectiveness, May 2002
- "Industry test-fires new secrecy weapon" [Environment Writer, 14(8):9 (January, 2003)]
- "Federal Quality Act: A useful tool [for farmers and ranchers]" [Stewards of the Range, November 2002]



Perceptions, continued…

- **"…the goal of the Data Quality Act [is] to bring… consistency to the to the quality of government information by codifying requirements that data used and disseminated by the federal government [will] be objective" [Jim Tozzi, CRE, May 2002]**
- **"The precautionary principle lies at the heart of the controversy over the role of science in the regulatory state. It means taking action…even if the relationship between cause and effect is not fully established scientifically" [L. Greer & R. Steinzor, Environmental Forum, February 2002**
- **"This the first time, where if the data is not good, you can actually begin challenging the agency" [William Kovacs, U.S. Chamber of Commerce, March 2002]**
- **"'Data Quality' Law is Nemesis of Regulation" Rick Weiss, Washington Post, 16 August 2004**

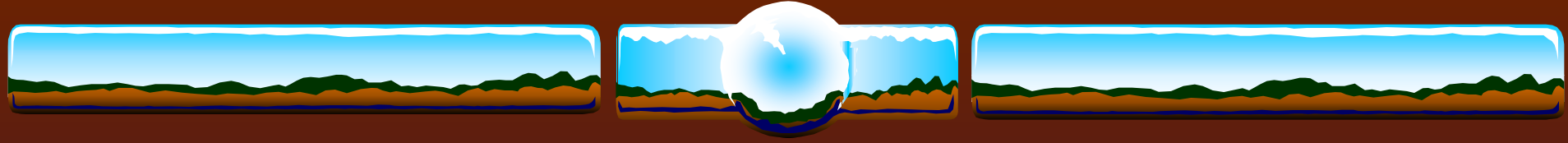
Summary of Agency Reports for FY03

of Information Correction Requests (OMB Report to Congress)

Agriculture (5)	Veterans Affairs (1)
Commerce (4)	CPSC (4)
Defense (1)	EPA (13)
Education (1)	FEMA (24,433)
HHS (10)	NASA (1)
Interior (6)	National Archives (8)
Justice (3)	OS&TP (1)
Labor (18)	CFTC (1)
Transportation (89)	FDIC (1)
Treasury (19)	

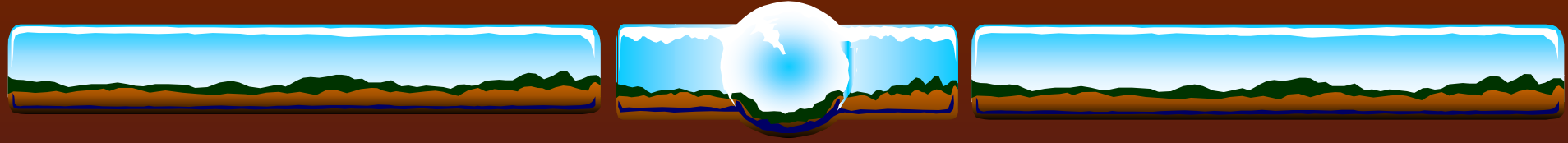
Conflicting Views

- **The OMB Report to Congress is controversial – "data is inaccurate, information is misleading, and overall the report is highly biased" [OMB Watch, July 2004]**
- Issues:
  - Number of cases (98) and agency workload under-reported
  - Only 28 percent of denials were appealed, not "most"
  - Wide diversity of stakeholder requests on paper, but 72 percent from industry or industry lobbyists
  - Rule-making has been delayed by the process



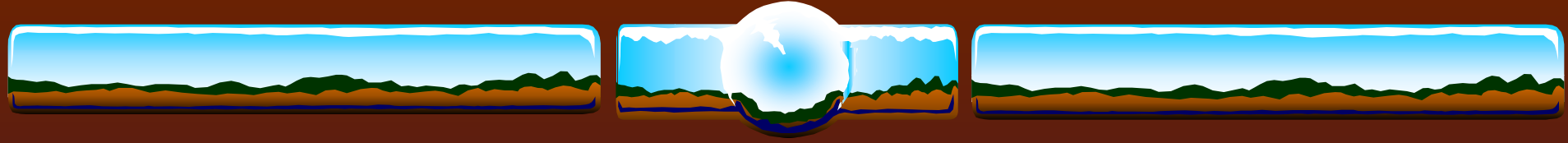
The Issues for Social Scientists

- How can traditional knowledge, scientific knowledge, and the requirements of the Information Quality Act be integrated?
- What effect will the Information Quality Act have on the dissemination of the results of social science research?



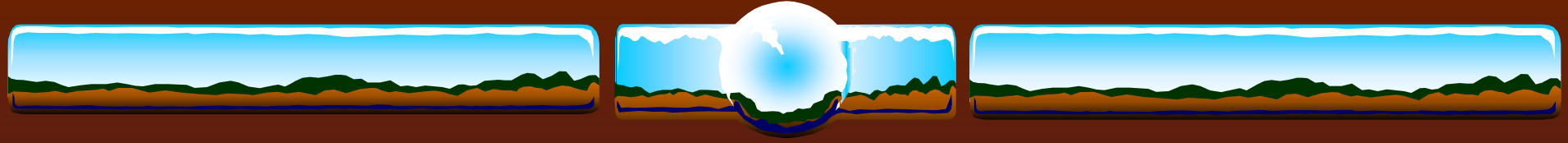
Traditional Knowledge

- Traditional knowledge is seen as that particular cultural and material knowledge acquired by or passed on to an artisan in his trade or occupation
- It is particular to an individual and embedded within his culture
- It includes, for fishermen, knowledge of specific fishing grounds, efficiency of fishing gears, and behavior of target species and their ecology
- Traditional knowledge is seen as proprietary and essential to the livelihood of the individual



Scientific Knowledge

- Scientific knowledge is acquired by experimentation and observation, recorded and disseminated for general use and the development of theoretical models
- It relies upon peer review and replication to ensure accuracy
- Transparency of results and impartial conclusions are the foundations of science
- Scientists are comfortable with data gaps and uncertainty; these are viewed as “problems” for future research

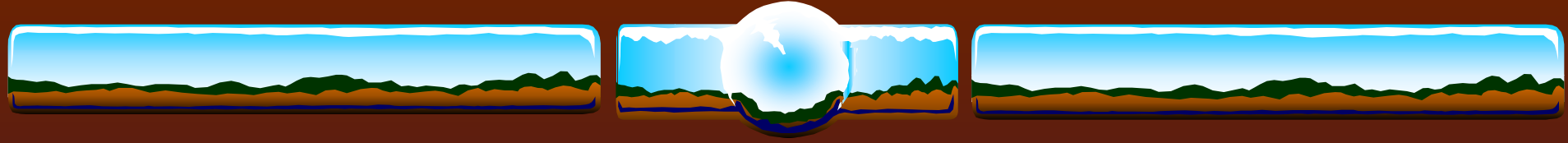


Information Quality

- "Quality" is an encompassing term comprising utility, objectivity, and integrity
- "Utility" is the usefulness of the data to its users, including the general public
- "Integrity" refers to the security of the information and its protection from unauthorized access or revision
- "Objectivity" involves two distinct elements, presentation and substance
  - Presentation is the display of information in an accurate, clear, complete and unbiased manner
  - Substance is the focus on accurate, reliable and unbiased data generated using sound statistical and research methods.

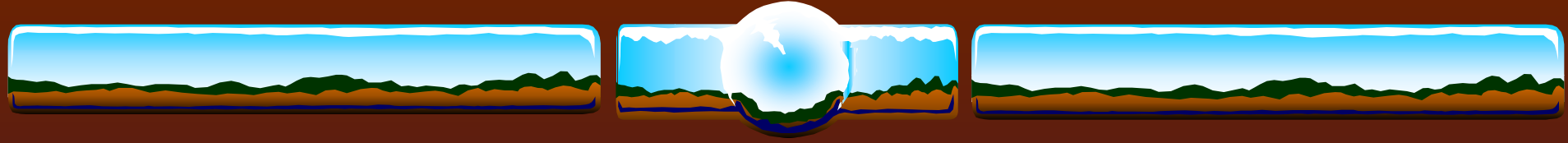
What does this mean to social scientists?

- Information collected using accepted social science methods and subjected to an independent, formal peer-review can normally be published by agencies
- For confidential data, the researcher must document the research design, methods, and means of analysis



What does this mean to social scientists? (continued)

- Data and/or models that have not been peer-reviewed cannot be used in regulatory actions
- Some data previously provided by agencies will not be available to the public or used in analysis anymore; this applies particularly to preliminary data sets and information about cutting edge studies, as well as some technical papers and other internal documents



How can traditional knowledge and scientific knowledge be included?

- For many, the Data Quality Act promises that traditional knowledge will be used in agency decision-making on par with scientific knowledge
  - Problem: Traditional knowledge must be treated as proprietary in the same manner as private industry information
  - Problem: Traditional knowledge must be subjected to the same tests of utility, integrity, and objectivity as scientific knowledge
  - Plus: Aggregated traditional knowledge, if collected using accepted social science methods, can be used by agencies

How should NOAA Fisheries social scientists respond?

- Use consistent, accepted social science methods to develop fishery databases and information
- Ensure that the processes and methods of research are fully documented and available to the public
- Encourage academic and private sector colleagues to meet the same standards so that the research from these colleagues can be used by NOAA Fisheries

Changes to the Guidance

- OMB has published a Revised Information Quality Bulletin on Peer Review [Federal Register 69(82): 23230-23242; April 28, 2004] for comment
- OMB requires agencies to post Information Quality Correction Requests and Responses to their websites [Memorandum to the President's Council, August 30, 2004]

Peer Review

- Peer review is to be required for all “influential scientific information” and “highly influential scientific assessments”
- “scientific information” includes factual inputs, data, models, analyses, or scientific assessments related to the sciences and any communication of this information in any medium
- “scientific assessment” means an evaluation of a body of scientific or technical knowledge which synthesizes multiple factual inputs, data, models, assumptions and/or best professional judgments to bridge uncertainties in available information

Posting of Information Quality Correction Requests and Responses

- By December 1, 2004, each agency must have a public website to:
  - Display each correction request
  - A description of the context of the action and request
  - The Agency's formal response
  - All communications regarding appeals

Conclusion

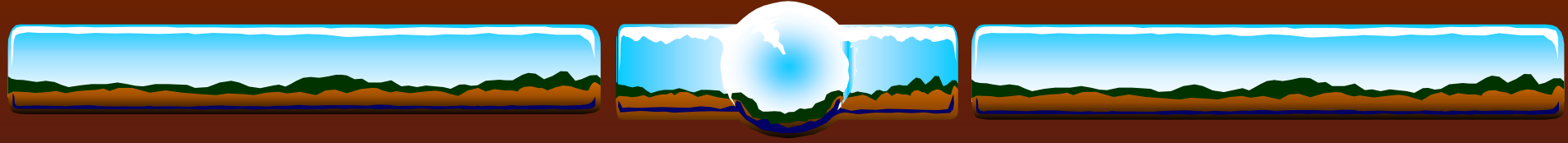
- The Information Quality Act poses both a problem and an opportunity…
  - The problem: Data and information disseminated by Federal agencies must conform to minimum quality standards
  - The opportunity: Data and information quality can be improved thus benefiting the scientific endeavor and the general public

For more information…

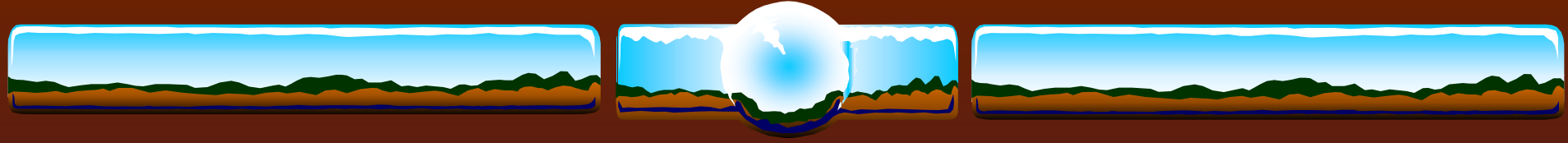
- Go to the NOAA Fisheries' Information Quality Act intranet page… http://apps.nwfsc.noaa.gov/ and click on DQA Information

References

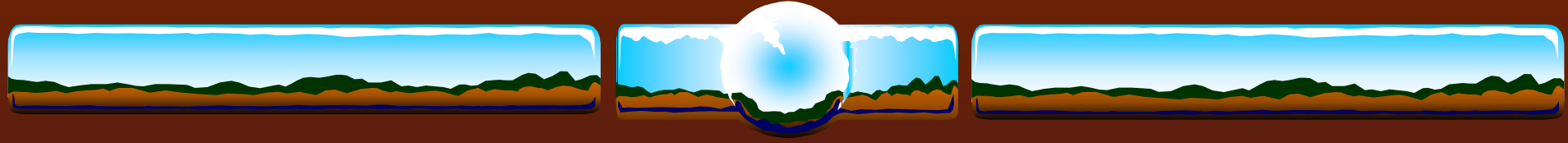
- Bisong, Susan M. (2003): Federal Agencies Subject to the Data Quality Act. Albuquerque, NM: Modrall, Sperling, Roehl, Harris & Sisk, P.A.
- Brand and Frulla letter (October 16, 2003) to NMFS: Data Quality Act Petition as to Groundfish Amendment 13
- Center for Progressive Regulation letter (May 27, 2004) to OIRA: Re Revised Information Quality Bulletin on Peer Review
- Center for Progressive Regulation letter (August 3, 2004) to EPA and OIRA: Re: Regulated Industries' Request for Correction regarding State Rules regarding Volatile Organic Compounds in Paint
- Center for Regulatory Effectiveness, Kansas Corn Growers Association, and The Triazine Network (2002): Request [to the EPA] for Correction of Information Contained in the Atrazine Environmental Risk Assessment. Washington, DC: Center for Regulatory Effectiveness (November 25, 2002)



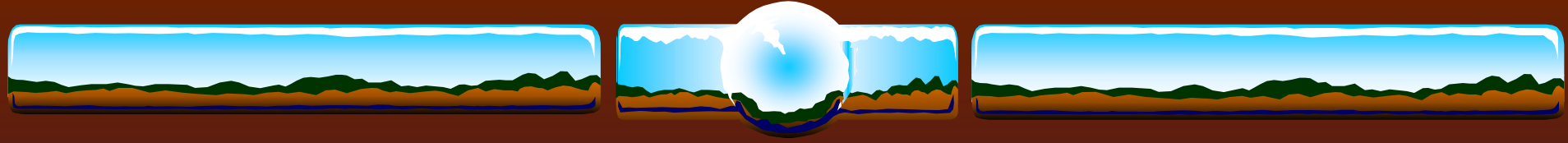
- Center for Regulatory Effectiveness: Request for Correction of Information contained in a World Health Organization Report. Filed with USDA and HHS on September 8, 2003
- Competitive Enterprise Institute (2002): CEI's Petition to EPA to Cease Dissemination of Climate Action Report: Speeches and Presentations by Christopher C. Horner, June 4, 2002. Http://www.cei.org/
- Council on Environmental Quality (2002): Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility and Integrity of Information. Federal Register, October 18, 2002.
- Davis, Joseph A.. (2003): Industry Test-Fires New Weapon. Environment Writer, December 2002/January 2003: 9



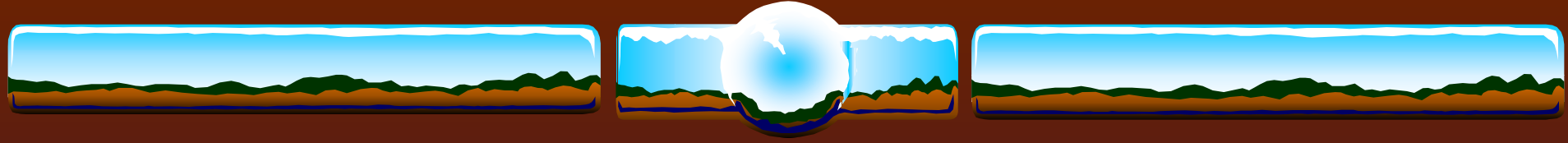
- Defense Nuclear Facilities Safety Board (2002): Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Disseminated Information. Federal Register 67(234):72413-72417
- Environmental Working Group: Request for Correction of FDA's "Advice for Women Who are Pregnant, or might become Pregnant, and Nursing Mothers, about avoiding Harm to Your Baby or Young Child from Mercury in Fish and Shellfish". Filed with FDA December 22, 2003
- Food Industry Environmental Council (2002): AFFI [American Frozen Food Institute] and FIEC submit comments on Clear Skies Initiative and Infor Nmation Quality Guidelines. AFFI Environmental Forum Newsletter, July: Editorial
- Geewax, Marilyn (2002): New Law Means More Federal Rules Can Be Challenged. Cox News Service: September 30. http://www.citizensreviewonline.org/Oct_2002/new_law_means.htm
- Grant, Fred Kelly (2002): Federal Data Quality Act: A Useful Tool. Stewards of the Range http://www.stewardsoftherange.org/
- Greer, Linda and Rena Steinzor (2002): Bad Science. Environmental Forum, January/February:28-43 (The Environmental Law Institute)



- Herrick, Chuck (2002): Editorial Response ~ The Data Quality Act. Ogmius, No.2, May, 2002. (Center for Science and Technology Policy Research, University of Colorado)
- Horvath, Stephanie M. (2002): New Law Will Let Businesses Attack Data Underlying Rules. The Wall Street Journal Online: July 5
- Michaels, Patrick J. (2002): Science Junk Hits the Washington Fan. Cato Institute at http://www.cato.org/cgi-bin/scripts/printtech.cgi/dailys/02-25-02.htm
- NOAA (2002): National Oceanic and Atmospheric Administration Information Quality Guidelines. NOAA Magazine, September 30, 2002. http://www.noaanews.noaa.gov/stories/iq.html
- National Resources Defense Council (2002): Comments Regarding EPA Draft Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility and Integrity of Information. Letter from NRDC to EPA, May 31, 2002.
- National Resources Defense Council (2002): Comments on the Preliminary Cumulative Risk Assessment of the Organophosphorus Pesticides, released December 3, 2001 [submitted to EPA, March 8, 2002]. Washington, DC: Natural Resources Defense Council



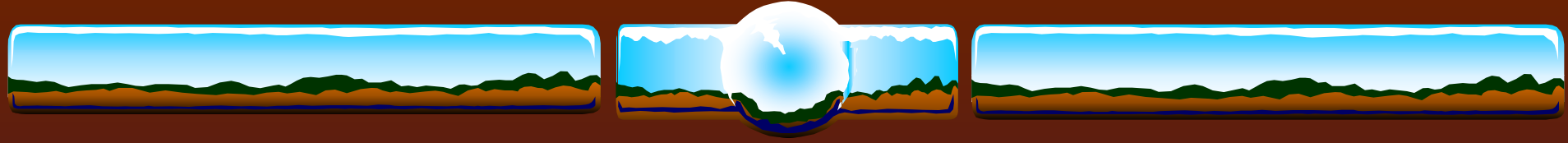
- Office of Management and Budget (2002): Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Dissemination by Federal Agencies. Federal Register: 67(36):8451-8460
- Office of Management and Budget (2004): Information Quality: A Report to Congress– Fiscal Year 2003
- Office of Management and Budget (2004): Revised Information Quality Bulletin on Peer Review. FEDERAL REGISTER 69(82):23230-23242
- Office of Science and Technology Policy (2002): Final Guidelines for Ensuring the Quality Disseminated Information. Washington, DC: Office of Science and Technology Policy, Executive Office of the President (October 1, 2002)
- OMB Watch (2004): The Reality of Data Quality Act's First Year: A Correction of OMB's Report to Congress
- Raney, Rebecca Fairley (2002): Questions About Online Data. The New York Times on the Web: June 3
- Revkin, Andrew C. (2002) Law Revises Standards for Scientific Study. The New York Times: March 21:1



- Slaughter, Scott (2002): Federal Agency Authority to Create Exemptions from the Data Quality Guidelines that are Required by the Paperwork Reduction Act's Information Dissemination Provisions. Memorandum from Scott Slaughter, Multinational Legal Services, PLLC, to The Center For Regulatory Effectiveness, May 29, 2002 http://www.TheCRE.com/

- The National Academy of Sciences (2002): Ensuring the Quality of Data Disseminated by the Federal Government: Transcripts of Workshop Proceedings: Workshop 1, March 21, 2002; Workshop 2, March 22, 2002; Workshop 3, May 30, 2002. Washington, DC: The National Academy of Sciences; Science, Technology and Law Program

- Tozzi, Jim J. (2002): Editorial ~ The Data Quality Act: A New Tool for Ensuring Clarity at the Interface of Science and Policymaking. Ogmius, No. 2, May 2002:1-3 (Center for Science and Technology Policy Research, University of Colorado)



- U.S. Department of the Interior (2002): Information Guidelines Pursuant to Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001. Washington, DC: U.S. Department of the Interior (October 1, 2002)

- U.S. Department of State (2002): Information Quality Guidelines. Washington, DC: U.S. Department of State, Office of the Legal Advisor (October 1, 2002)

- U.S. Department of Transportation (2002): The Department of Transportation's Information Dissemination Quality Guidelines. Washington, DC: U.S. Department of Transportation

- U.S. Fish and Wildlife Service (2002): U.S. Fish and Wildlife Service Information Quality Guidelines. Washington, DC: U.S. Fish and Wildlife Service (September 30, 2002)

- USGS Toxic Substances Hydrology Program (2003): How Reliable are Chemical Property Data in the Literature? News Release, January 22. **Http://toxics.usgs.gov/highlights/kow/htm**